

CLAIMS

Sub B1
1 1. A processing aid for thermoplastic resin having a weight
2 average molecular weight of 10,000 to 300,000, which is obtained by
3 polymerizing an alkyl (meth)acrylate, or an alkyl (meth)acrylate and
4 another vinyl monomer copolymerizable therewith, in the presence of a
5 mercaptan having an alkyl ester group with C₄₋₂₀ alkyl group as a chain
6 transfer agent, and/or an organic peroxide having a tertiary-butyl
7 peroxy group as a polymerization initiator.

1 2. The processing aid for thermoplastic resin of Claim 1,
2 which is obtained by polymerizing 0.1 to 10 % by weight of the
3 (meth)acrylate having an oxygen atom in addition to an ester bond as
4 said alkyl (meth)acrylate, 10 to 99.9 % by weight of another alkyl
5 acrylate, and 0 to 89.9 % by weight of another vinyl monomer
6 copolymerizable therewith.

1 3. The processing aid for thermoplastic resin of Claim 1,
2 wherein an amount of the organic peroxide having a tertiary-butyl
3 peroxy group is 0.1 to 5 parts by weight based on 100 parts by weight of
4 the entire monomers.

1 4. A thermoplastic resin composition comprising 100 parts
2 by weight of a thermoplastic resin and 0.1 to 20 parts by weight of the
3 processing aid for thermoplastic resin of Claim 1.

1 5. The thermoplastic resin composition of Claim 4, wherein

2 the thermoplastic resin is at least one resin selected from the group
3 consisting of poly(vinyl chloride) resins, polyethylene, polypropylene,
4 polyester, polystyrene, polycarbonate, a methacrylate resin and an ABS
5 resin.

1 6. The processing aid for thermoplastic resin of Claim 2,
2 wherein the (meth)acrylate having an oxygen atom in addition to an ester
3 bond is a (meth)acrylate containing an epoxy group.

1 7. The processing aid for thermoplastic resin of Claim 2,
2 wherein the (meth)acrylate having an oxygen atom in addition to an ester
3 bond is a (meth)acrylate containing a hydroxy group.

1 8. The processing aid for thermoplastic resin of Claim 2,
2 wherein the (meth)acrylate having an oxygen atom in addition to an ester
3 bond is a (meth)acrylate containing an alkoxy group.

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